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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/698,118	10/27/2000	Duane Girard Uitenbroek	KCC-14,607	6282

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EXAMINER
WACHTEL, ALEXIS A

ART UNIT	PAPER NUMBER
1771	3

DATE MAILED: 05/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/698,118	UITENBROEK ET AL.	
	Examiner	Art Unit	
	Alexis Wachtel	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 October 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 11 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. With regards to claims 11 and 12, it isn't clear how said claims further limit claim 1, since claim 1 encompasses the limitations of claim 1.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-13,17,18 and 23 and 26-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,883,028 to Morman et al (Morman '028) in view of US 5,114,781 to Morman (Morman '781).

The method limitation of claim 28, wherein the film and web are bonded together via a co-extrusion coating process is given patentable weight in so far as the effects the claimed steps have on the structure and/or chemistry of the final product. It is believed the claimed process will be identical to a web thermally or ultrasonically bonded to the film as taught in the cited art discussed below.

(Morman '028) is directed to breathable elastic laminates and teaches a stretchable spunbonded nonwoven web bonded to an elastic film, either thermally, ultrasonically, or with an adhesive when the web is in an elongated "necked" in condition. Bonding of the unstretched elastic film to the necked in nonwoven web provides a breathable laminate which is stretchable in a direction parallel to the direction of the narrowing or necking of the web before lamination, and which partially or fully recovers when the stretching force is removed (Col 2, lines 6-18). Said film can be made from any suitable film-forming elastic polymer that exhibits and ability to absorb and diffuse water vapor such as polyurethanes, polyester ethers and polyether amides (Col 2, lines 1-5). Said breathable elastic film or sheet includes a water vapor soluble polymer (Col 6, lines 4-6) which meets the limitations of claim 5. The breathable elastic film or sheet should have a moisture vapor transmission (MVTR) rate of at least 2000 grams/m^2-24 hours (Col 6, lines 13-18). The neckable nonwoven web can be made of fiber forming polymers such as polyolefins, meeting the limitations of claim 13. With regards to claim 36, the breathable elastic laminate is useful as an outer cover for disposable diapers and other personal care products. The laminate is also useful for breathable surgical gowns and other breathable applications (Col 1, lines 5-10).

(Morman '028) fails to teach that the breathable elastic laminate is biaxially stretchable. (Morman '781) is directed to multi-directional stretch composites and treaches a composite elastic material that can stretch in at least two directions (Col 4, lines 35-40). Such a composite is useful in products such as diapers, tissues, wipes garments, mattress pads and feminine care products. It would have been obvious for

one of ordinary skill in the art at the time the invention was made to have manufactured the breathable elastic laminate of (Morman '028) such that said laminate has biaxial stretch properties motivated by the desire to improve the tactile properties of said laminate (Morman '781, Col 1, lines 13-28).

With regards to claims 1 and 29-35, although the claimed stretch ratios are not explicitly taught by (Morman '028) or (Morman '781), it is reasonable to presume that said limitations would be met by the combination of the two references. Support for said presumption is found in the use of similar materials (i.e. biaxially stretchable laminate made from a biaxially stretchable nonwoven spunbonded web and elastic water vapor permeable polymeric film) and in the similar production steps (i.e. bonding web to film) used to produce the breathable elastic laminate. The burden is upon the Applicant to prove otherwise.

With regards to claim 6, although (Morman '028) in view of (Morman '781) as set forth above fails to explicitly teach using a film for the breathable elastic laminate wherein said film is a breathable microporous film, (Morman '028) does teach that water vapor can pass through films made with pores or voids (Col 1, lines 53-57) and thusly describes microporous film and films through which water vapour may diffuse on a molecular level as equivalent for the purpose of facilitating moisture transport. The selection of these known equivalents would be within the level of ordinary skill in the art and obvious, motivated by the desire to choose a readily available or cost effective material suitable for the instant application.

With regards to claim 10, (Morman '028) in view of (Morman '781) as set forth above fails to teach the claimed film basis weight. However it would have been obvious for one of ordinary skill in the art at the time the invention was made to have optimized the strength and durability of the breathable elastic laminate by selecting an appropriate basis weight for the prodcut's utility through the process of routine experimentation.

6. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over (Morman '028) in view of (Morman '781) further in view of US 5,855,999 to McCormack.

(Morman '028) in view of (Morman '781) as set forth above fails to teach making the web of the breathable elastic laminate out of side by side bi-component spunbond fibers wherein said side by side bi-component spunbond fibers are made of polypropylene and another polyolefin.

McCormack is directed to a breathable cloth-like film/nonwoven composite having useful applications in personal care absorbent articles such as diapers, sanitary napkins and incontinence garments (Col 1, lines 15-31). The nonwoven web used in the composite is a spun bond web that can be made from bicomponent fibers such as side-by-side, sheath/core and islands-in-the-sea. Such bicomponent fibers can be made from polyethylene and polypropylene (Col 9, lines 1-10). Since side-by-side type conjugate filaments, which are composed of two polymers of different heat shrinkage, and cause the filaments to manifest crimps by the different heat shrinkage, it would have been obvious for one of ordinary skill in the art at the time the invention was made to have incorporated side-by-side bicomponent fibers made of polyethylene and

polypropylene into the web of (Morman '028) in view of (Morman '781) as set forth above motivated by the desire to impart greater elasticity to said web.

7. Claims 24,25,38 are rejected under 35 U.S.C. 103(a) as being unpatentable over (Morman '028) in view of (Morman '781) further in view of (Kadolph et al, Textiles, 1998, Prentice Hall Inc., 8th Edition, pp.76, 395)

With regards to claims 24 and 25 (Morman '028) in view of (Morman '781) as set forth above fails to teach that the spunbonded nonwoven web may be creped or crimped.

Kadolph et al teaches that that it is common and well known in the textile art to impart cohesiveness, stretch, and bulking properties to fabrics by crimping (pp.76, Col 2) and to impart a soft hand to a fabric by creping (pp.395, Crepeing definition). As such, it would have been obvious to a person having ordinary skill in the art to have exploited creping and crimping techniques for the purposes of imparting the above disclosed desirable properties to a fabric such as a nonwoven. The use of such techniques would have been motivated by the desire to improve the cohesivness, stretch, bulk and hand of the nonwoven spunbonded web via the use of well known techniques.

With regards to claim 38, (Morman '028) in view of (Morman '781) as set forth above fails to teach applying a creped spunbonded nonwoven web to the film. Since crepeing is a known technique for imparting a softer hand to a fabric, it would have been obvious for one of ordinary skill in the art at the time the invention was made to have creped the spunbonded nonwoven web motivated by the desire to impart a softer hand

to the web. It would also have been obvious for one of ordinary skill in the art to have creped the web prior to bonding it to the film motivated by the desire to prevent the crepeing process from damaging the film as would result if the web and film were already bonded together.

8. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over (Morman '028) in view of (Morman '781) further in view of US 6,129,801 to Benson et al.

(Morman '028) in view of (Morman '781) as set forth above fails to teach using a thermoplastic elastomer, such as thermoplastic polyurethane wherein said elastomer is a single site catalyzed elastomer. Benson et al is directed to webs having enhanced extensibility in multiple directions, wherein said webs are useful for use in disposable absorbent articles such as diapers, incontinence briefs, training pants, feminine hygeine products (Col 1, lines 5-15). Generally, any suitable elastomeric fiber forming resins or blends may be used for nonwoven webs of elastomeric fibers such as polyurethane elastomeric materials (Col 9, lines 60-67, Col 10, lines 1-8). It would have been obvious for one of ordinary skill in the art at the time the invention was made to have incorporated elastomeric material such as polyurethane into the spunbonded web of (Morman '028) in view of (Morman '781) as set forth above motivated by the desire to enhance said web's stretchability. With regards to claim 19, polyurethane is a single site catalyzed elastomer.

9. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over (Morman '028) in view of (Morman '781) further in view of US 5,554,143 to Roe et al.

(Morman '028) in view of Morman (Morman '781) as set forth above fails to teach prestretching the film used in the breathable elastic laminate prior to bonding it to the spunbonded nonwoven web.

Roe et al is directed to absorbent articles such as diapers, incontinent briefs having an extensible waist feature (Col 1, lines 10-15). Extensible back waist features preferably comprise a structural elastic-like film (SELF) web (Col 2, lines 54-59). It may be desirable for the (SELF) web to exhibit a certain degree of bulkiness. One method of providing this bulk includes forming a polymeric film, prestretching it and subsequently applying a nonwoven to one or both sides of said film while said film is in a prestretched state. Upon relaxation of the film's stretch, the nonwoven material forms puckers which give the material added bulk (Col 24, lines 38-48). In view of this teaching it would have been obvious for one of ordinary skill in the art at the time the invention was made to have prestretched the film of (Morman '028) in view of (Morman '781) as set forth above before applying to the spunbonded nonwoven web, motivated by the desire to impart bulk to the resulting laminate and thusly increase the cushioning capabilities of said laminate.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Alex Wachtel, whose number is (703)-306-0320. The Examiner can normally be reached Mondays-Fridays from 10:30am to 6:30pm.

If attempts to reach the Examiner by telephone are unsuccessful and the matter is urgent, the Examiner's supervisor, Mr. Terrel Morris, can be reached at (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

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